## FY 11 Apiary Inspection Report Illinois Department of Agriculture (July 1, 2010 through June 30, 2011)

The Illinois Department of Agriculture administers the Illinois Bees and Apiaries Act. Department Apiary Inspectors examine honeybee colonies around the state for the issuance of moving permits, to monitor the health of the bee population, to prevent the spread of diseases and pests of the honeybee and to provide advice on general honeybee management.

Beekeeping in Illinois continues to be a hobbyist endeavor with slightly more than 87% of the beekeepers managing 10 colonies or less (Table 1). 14 beekeepers maintain 100 or more colonies in the state.

Beekeepers are required to register with the Department of Agriculture. As of the end of fiscal year 2010, 1,815 beekeepers were managing 21,266 colonies in 2,786 apiaries in Illinois (Table 2). The number of registered beekeepers has increased significantly as compared to the past year. 277 new beekeepers were registered during the fiscal year. The total number of registered beekeepers statewide has increased each year since 2002. Table 3 lists the number of colonies and apiaries registered in each county in Illinois. JoDaviess County had the highest number of colonies with 1,741. Iroquois County and Union County placed second and third, with 1,554 and 1,488 colonies, respectively.

Colony inspection statistics for fiscal year 2011 and several previous years are included in Table 4. From July 1, 2010, through June 30, 2011, 308 apiaries containing 2,135 colonies were visited. Of these colonies, 1,538 were actually opened and inspected. American Foulbrood Disease (AFB) was detected in 1 colony, or .06 % of the colonies actually opened. This shows a decrease in the number of colonies infected with AFB as compared to 2010. In accordance with the Act, the diseased colony was destroyed. There was a significant decrease in the number of colonies infected with European Foulbrood and Chalkbrood as compared to Fiscal Year (FY) 2010.

Varroa mites continue to be found throughout the state. Inspection reports during the fiscal year indicated a significant decrease in varroa mite levels as compared to last year. This may be due in part to the randomness of inspections, the time of year inspections were made, environmental conditions and possible resistance to chemicals for varroa mite treatment. No large infestations were found with inspections.

Reports from around the state indicated colony losses following the winter were light in some areas and heavy in other areas. Also, interest in colonies for pollination continues to increase due to the lack of feral colonies and the realization of the importance of honeybee pollination.

Tracheal mites are not listed as a regulated parasite in the Bees and Apiaries Act and rules. However, examinations for tracheal mites can still be performed when requested. Tracheal mites were discovered in 2 colonies in conjunction with Department apiary inspections for FY 11, as determined by laboratory tests.

The small hive beetle continues to be a problem in Illinois. Based upon the Department's inspections, the SHB has spread to a total of 38 counties in isolated locations. The Department continues to closely monitor the movement of the SHB across Illinois.

There are various products are on the market to combat the varroa mite. Mite-Away Quick Strips is the newest product approved for use by the USEPA to control varroa mites. This new product is also registered with the Illinois Department of Agriculture and is available for use by beekeepers.

Colony Collapse Disorder (CCD) has affected many honeybee colonies across the United States. To date, CCD has not been confirmed in Illinois. The Department monitors colonies closely for CCD-like symptoms and investigates as appropriate. Federal research continues to determine the cause(s) of CCD. The CCD issue has greatly increased public awareness on the importance of honeybees to humankind.

The Department and the Illinois State Beekeepers Association continue to encourage active communication between beekeepers and licensed pesticide applicators to accomplish the reduction of honeybee exposure to various pesticides (herbicides, insecticides, fungicides, etc.). There have been some instances where honeybees have been exposed to these materials, at times with catastrophic impacts.

Licensed pesticide applicators can continue to gain contact and locational information related to Illinois beekeepers on the Department's website through the Drift Watch<sup>TM</sup> internet site. In addition, beekeepers can register their colonies on the Drift Watch site. The Department encourages pesticide applicators to contact beekeepers well in advance of an application to allow them to take needed steps to protect his or her honeybee colonies.

This is a voluntary process that does not guarantee the complete elimination of potential pesticide exposures to honeybee colonies. However, if the pesticide user community and beekeepers work together, these potential exposures can be greatly reduced.

TABLE 1

Distribution of Beekeeper Size in Illinois as of July 1, 2011

Number of Colonies	Number of Beekeepers	Percentage of Beekeepers		
0	73	4.02		
1-5	1250	68.87		
6-10	254	13.99		
11-20	132	7.27		
21-50	70	3.85		
51-100	22	1.21		
101-200	7	.04		
201-300	4	.02		
301-400	1	.005		
401-500	2	.01		
>500	0	0		
TOTAL	1815	100.0*		

<sup>\*</sup> May not total 100% due to rounding.

TABLE 2

Illinois Beekeeper and Colony Statistics from 1988 through 2011 as of July 1 of each year.

Year	Number of Registered Beekeepers	Number of Apiaries	Number of Colonies	Colonies/ Beekeeper	Colonies/ Apiary	
2011	1,815	2,786	21,266	11.7	7.6	
2010	1,631	2,565	20,547	12.6	8.0	
2009	1,433	2,325	19,680	13.7	8.5	
2008	1,366	2,303	19,556	14.3	8.5	
2007	1,329	2,216	18,821	14.2	8.5	
2006	1,264	2,157	20,217	16.0	9.4	
2005	1,213	2,054	27,646	22.8	13.5	
2004	1,141	1,940	19,572	17.2	10.1	
2003	1,117	1,926	18,649	16.7	9.7	
2002	1,107	1,914	17,963	16.3	9.4	
2001	1,160	2,038	19,627	16.9	9.6	
2000	1,142	1,975	18,504	16.2	9.4	
1999	1,208	2,025	16,939	14.0	8.4	
1998	1,295	2,136	18,129	14.0	8.5	
1997	1,521	2,464	17,276	11.4	7.0	
1996	1,515	2,506	16,896	11.2	6.7	
1995	1,782	2,879	19,037	10.7	6.6	
1994	1,999	3,252	21,872	10.9	6.7	
1993	2,021	3,350	24,240	12.0	7.2	
1992	2,249	3,668	26,405	11.7	7.2	
1991	2,329	3,758	27,693	11.9	7.4	
1990	2,705	4,336	33,800	12.5	7.8	
1989	2,783	4,413	34,966	12.6	7.9	
1988	2,966	4,649	37,025	12.5	8.0	

TABLE 3
Number of Registered Apiaries and Colonies in Illinois Counties as of July 1, 2011

# <b>O</b> F # <b>O</b> F			# OF	# OF	
COUNTY	APIARIES	COLONIES	COUNTY	APIARIES	COLONIES
Adams	33	305	Jefferson	10	85
Alexander	1	1	Jersey	8	60
Bond	25	59	JoDaviess	74	1741
Boone	19	320	Johnson	11	71
Brown	22	107	Kane	100	433
Bureau	41	196	Kankakee	35	349
Calhoun	4	12	Kendall	30	194
Carroll	23	478	Knox	25	251
Cass	14	57	LaSalle	42	185
Champaign	73	255	Lake	149	841
Christian	18	34	Lawrence	7	22
Clark	17	47	Lee	13	51
Clay	6	51	Livingston	14	32
Clinton	15	46	Logan	20	265
Coles	38	179	Macon	31	66
Cook	192	861	Macoupin	46	172
Crawford	10	23	Madison	61	223
Cumberland	17	49	Marion	12	28
DeKalb	21	118	Marshall	8	60
DeWitt	13	31	Mason	15	82
Douglas	17	45	Massac	3	402
DuPage	120	337	McDonough	17	76
Edgar	22	121	McHenry	93	722
Edwards	5	21	McLean	27	139
Effingham	15	72	Menard	13	58
Fayette	22	61	Mercer	10	28
Ford	8	33	Monroe	15	293
Franklin	12	67	Montgomery	18	67
Fulton	48	263	Morgan	19	70
Gallatin	3	23	Moultrie	16	83
Greene	5	44	Ogle	50	331
Grundy	17	162	Peoria	55	293
Hamilton	6	12	Perry	15	182
Hancock	24	171	Piatt	13	48
Hardin	1	13	Pike	11	19
Henderson	10	23	Pope	1	00
Henry	12	58	Pulaski	4	538
Iroquois	21	1554	Putnam	3	26
Jackson	33	207	Randolph	7	54
Jasper	27	119	Richland	14	36

COUNTY	# OF APIARIES	# OF COLONIES
Rock Island	16	81
Saline	2	5
Sangamon	112	383
Schuyler	11	37
Scott	4	6
Shelby	20	156
St. Clair	73	369
Stark	7	18
Stephenson	35	279
Tazewell	41	337
Union	10	1488
Vermilion	27	144
Wabash	2	4
Warren	15	138
Washington	19	76
Wayne	29	154
White	4	13
Whiteside	34	210
Will	74	959
Williamson	33	669
Winnebago	43	319
Woodford	30	110
TOTAL	2,786	21,266

TABLE 4

Illinois Apiary Inspection Statistics -- 1990 through June 30, 2011

Year	# of Apiaries Inspected	Colonies in Apiaries Inspected	# of Colonies Opened	# of Colonies	FB % of Colonies Opened	# of Colonies with EFB	# of Colonies w/ Chalk Brood	Varr	oa Mites % of Colonies Inspected	# of Colonies Tracheal Mites
FY11	308	2,135	1,538	1	.06	14	6	265	1.2	2
FY10	406	2,695	1,998	8	.4	35	28	483	1.8	10
FY09	344	4,027	2,947	7	.2	0	5	196	4.9	1
FY08	314	2,073	1,523	12	.8	3	10	113	5.5	1
FY07	343	2,561	1,824	23	1.3	7	24	157	6.1	1
FY06	346	2,673	1,939	36	1.9	2	17	182	6.8	-
FY 05	296	4,695	2,603	50	1.9	10	69	171	3.6	-
FY 04	219	4,696	1,747	37	2.1	1	48	54	1.1	-
FY 03	266	3,662	1,915	89	4.7	8	109	297	8.1	8
FY02	196	1,999	1,254	31	2.5	0	4	141	7.0	-
FY01	231	3,228	1,273	18	1.4	1	41	217	6.7	-
FY00	115	1,731	855	21	2.4	0	4	407	23.5	9
FY99	156	4,083	1,424	8	0.6	0	19	751	18.4	
FY98	199	3,027	1,388	85	6.1	0	51	1,232	40.7	5
FY97	277	2,086	1,236	32	2.6	2	7	99	4.7	-
FY96	279	2,480	1,349	156	11.8	5	54	260	11.3	-
FY95	333	2,584	1,363	15	1.1	3	6	837	32.4	88
FY94	530	3,809	2,357	72	3.1	8	33	1,090	28.6	121
FY93	419	2,366	1,530	48	3.1	6	10	672	28.4	144
FY92	460	-	2,173	62	2.8	19	25	389	-	119
Cal92	474	-	1,916	72	3.7	1	21	618	-	120
Cal91	459	2,944	2,437	64	2.6	3	9	392	-	286
Cal90	400	-	-	140	-	11	108	-	-	-

AFB = American Foulbrood Disease EFB = European Foulbrood Disease